Listing of Claims:

1.(Previously Presented) A method for controlling SO_3 in a combustion process of a sulfur-containing fuel utilizing selective catalytic reduction for the control of NOx emissions, the method steps comprising:

a) partially combusting the fuel in a first stage to create a reducing environment;

b) actively adjusting the reducing environment such that SO_3 is reduced to SO_2 to effectuate an overall decrease in SO_3 concentration prior to selective catalytic reduction to achieve a desirable level of SO_3 for optimizing precipitator function; and

c) combusting the remainder of the fuel and combustion intermediates in a second stage with oxidizing environment; thereby controlling the levels of SO_3 in the flue gases.

2.(**Currently Amended**) The method of claim 1, ~~further~~ including the step of micro-staging the first stage fuel combustion **to adjust**.

3.(Original) The method of claim 2, wherein the micro-staging is provided through the use of low-NOx burners.

4.(**Currently Amended**) The method of claim 1, ~~further~~ including the step of macro-staging the first stage of fuel combustion **to adjust**.

5.(Original) The method of claim 4, wherein the macro-staging is provided through the use of over-fired air.

6.(**Currently Amended**) The method of claim 1, ~~further~~ including a combination of micro-staging and macro-staging **to adjust**.

7.(Original) The method of claim 6, wherein the micro-staging is provided by low-NOx burners and the macro-staging is provided by over-fired air.

8.(Original) The method of claim 1, wherein the fuel is coal.

9.(Previously Presented) A combustion furnace utilizing selective catalytic reduction for the control of NOx emissions and a precipitator, said furnace operated with a method for controlling SO_3 in a combustion process of a sulfur-containing fuel, the method steps comprising:

a) partially combusting the fuel to create a reducing environment;

b) actively adjusting the reducing environment such that SO_3 is reduced to SO_2 to effectuate an overall decrease in SO_3 concentration and achieve a desirable level of SO_3 for optimizing precipitator function; and

c) combusting the remainder of the fuel in an oxidizing environment; thereby reducing the conversion of levels of SO_3 in the flue gases.

10.**(Currently Amended)** The method of claim 9, ~~further~~ including the step of micro-staging ~~the first stage fuel combustion~~ **to adjust**.

11.(Original) The method of claim 10, wherein the micro-staging is provided through the use of low-NOx burners.

12.**(Currently Amended)** The method of claim 9, ~~further~~ including the step of macro-staging ~~the first stage of fuel combustion~~ **to adjust**.

13.(Original) The method of claim 12, wherein the macro-staging is provided through the use of over-fired air.

14.**(Currently Amended)** The method of claim 9, ~~further~~ including a combination of micro-staging and macro-staging **to adjust**.

15.(Original) The method of claim 14, wherein the micro-staging is provided by low-NOx burners and the macro-staging is provided by over-fired air.

16.(Original) The method of claim 9, wherein the fuel is coal.

17.(Previously Presented) A method for controlling SO_3 concentrations in a combustion process of a sulfur-containing fuel, the method steps comprising:

a) partially combusting the fuel in a first stage to create a reducing environment;

b) actively adjusting the reducing environment time period such that SO_3 is preferentially reduced to SO_2 to achieve a desirable level of SO_3 for optimizing precipitator function; and

c) combusting the remainder of the fuel and combustion intermediates in a second stage with oxidizing environment; thereby controlling the levels of SO_3 in the flue gases.

18.(**Currently Amended**) The method of claim 17, ~~further~~ including the step of micro-staging the first stage fuel combustion **to adjust**.

19.(Original) The method of claim 18, wherein the micro-staging is provided through the use of low-NOx burners.

20.(**Currently Amended**) The method of claim 17, ~~further~~ including the step of macro-staging the first stage of fuel combustion **to adjust**.

21.(Original) The method of claim 20, wherein the macro-staging is provided through the use of over-fired air.

22.(**Currently Amended**) The method of claim 17, ~~further~~ including a combination of micro-staging and macro-staging **to adjust**.

23.(Original) The method of claim 22, wherein the micro-staging is provided by low-NOx burners and the macro-staging is provided by over-fired air.

24.(Original) The method of claim 17, wherein the fuel is coal.